# Introduction



## The 2007 VLAP Sampling Season

The Volunteer Lake Assessment Program (VLAP) set a new participation record again this season. A total of 173 lakes were sampled, 11 new lakes joined the program, and approximately 500 volunteer monitors participated in the program!

We extend a special welcome to the volunteer monitoring groups that joined VLAP for the first time this year. These volunteers represent the following waterbodies: Bolster Pond, Sullivan; Burns Pond, Whitefield; Conner Pond, Ossipee; Dublin Lake, Dublin; Lake Francis, Clarksville; First Connecticut Lake, Pittsburg; Garland Pond, Moultonborough; Glen Lake, Goffstown; Goose Pond, Canaan; Locke Lake, Barnstead; and Mirror Lake, Tuftonboro.

And, we welcome back our friends and new monitors at Little Island Pond, Pelham; Turee Pond, Bow; Back Lake, Pittsburg; and Russell Reservoir, Harrisville who rejoined VLAP during the 2007 season.

### 2007 Weather Conditions in New Hampshire

The 2007 sampling season in New Hampshire was marked by warmer temperatures in May, June, August and September. May was warmer and wetter than normal, June was warm and dry, and July experienced cool and wet conditions. August was much drier than normal causing low water levels and little to no tributary flow which can increase nutrient concentrations in the water column. September also proved to be much warmer than a normal year. The unseasonably hot weather along with increased nutrients provide perfect conditions for increased algal cell production (algae blooms). However, some lakes also experienced record Secchi disk transparency readings.

At least eight VLAP lakes experienced cyanobacteria bloom conditions that resulted in public health warnings to lake residents. At least two lakes experienced cyanobacteria blooms during the entire season.

#### 2007 Program Updates

As many of you, Sara Sumner was hired as the new VLAP Coordinator in May of 2007. Sara survived the first field season, no doubt as a result of the encouragement and support received from the volunteers; Thank You! We sincerely hope everything ran smoothly this summer. We encourage any feedback you may have for program improvements; please don't hesitate to contact us.

VLAP continued to measure Secchi disk transparency with the viewscope this season. On the annual biologist visit, each monitoring group collected Secchi disk transparency readings with and without the viewscope, a white plastic PVC pipe with a clear plexiglass end. A comparison of transparency readings, with and without the viewscope, shows that the viewscope typically increases Secchi disk depth and therefore the transparency of the lake, particularly on sunny and windy days. We strongly

2007

encourage all monitoring groups to use a viewscope to take Secchi disk readings. Viewscope readings result in less variability in transparency readings between monitors and sampling events. Continued use of the viewscope will allow VLAP to conduct statistical trend analyses between both viewscope and non-viewscope data.

#### 2007 Report Updates

The 2007 Interim Report format has been updated. These reports now contain an Executive Summary section, Graphics and Current Year Data only. The Biennial Reports will remain the same and will provide historical data and statistical trend analysis for lakes with greater than 10 yrs. of data. Transparency graphs have been updated to include both viewscope and non-viewscope current year data on the bar graph. The historical non-viewscope graph will remain the same however the historical viewscope graph has been eliminated.

## Concluding Remarks

Carerfully read the "Observations and Recommendations" and "Data Quality Assessment and Quality Control" sections of your report, and pay special attention to our suggestions to improve lake quality and your current sampling program.

This year's Special Topic Article "The Revised Comprehensive Shoreland Protection Act" is found in Appendix C of the Interim Report and Appendix D of the Biennial Report. This will provide you with a useful tool to educate fellow lake residents and town officials. Please share the information with your peers. Remember, if you suspect that a Shoreland Protection Violation is occuring, please do not hesistate to conduct us or the DES Wetlands Bureau at (603) 271-7109. You are our "eyes and ears" and your diligent efforts have proven to protect the water quality of NH's lakes and ponds.

We realize that a vast amount of information is presented in the following report. If you have any questions regarding your 2007 report, please feel free to contact us. And finally, please contact the VLAP Coordinator this spring to schedule the annual biologist lake visit or to schedule a summer lake association meeting speaker. Also, please note the change in email address format for all DES employees; although our old addresses are still viable, we encourage you to use the new addresses.

Sincerely,

Sara Sumner VLAP Coordinator (603) 271-2658 sara.sumner@des.nh.gov Jody Connor Limnology Center Director (603) 271-3414 jody.connor@des.nh.gov